



> Innovative silicon extraction  
for the energy supply of the future.



Energy for the Future  
Water for the World



- > All over the world, fossil energies run short and raw materials such as oil and gas get more and more expensive.
- > Renewable energies will therefore become more and more important as provided by nature infinitely and for free.
- > Experts predict an exceptional big career to the clean solar energy. The G+R Technology Group plays a major role in this context.
- > G+R plants enable the extraction of high-quality polysilicon for the worldwide application in photo-voltaic installations.
- > Join this futurable energy boom – benefit from undreamed-of possibilities.

> Open up the chance of trendsetting technologies.





## > Visionary systems engineering for the extraction of polysilicon.

### The sun is our future

While fossil energies such as crude oil, coal and natural gas run short, the raw material prices explode. Furthermore, crude oil et al. negatively impact our atmosphere, producing exhaust fumes, environmental pollution and dangerous global warming. Due to its inexhaustible energy, the sun is our future. The expertise of the G+R Technology Group is a big contribution in terms of using the solar energy as kind of paradigm energy of the 21st century. Clean energy for the future of human beings and nature.

### Ultra-pure polysilicon is the basis for high-capacity solar cells

Polysilicon is needed for the manufacture of photo-voltaic plants and solar cells, in order to making the unlimited solar energy useful for human beings. This is the basic material for the solar cell production. G+R manufactures and delivers you the entire systems engineering for the extraction of the basic material polysilicon.

### Expert knowledge and bright future prospects

G+R is an experienced expert and estimated consultant in terms of photo-voltaic and investment projects worldwide, an innovative manufacturer of reactors and plants for the silicon crystallization, an expert regarding the entire crystallization process chain and the respective control technology as well as a guarantor for highly-efficient raw materials.

### Innovative solutions for each conceivable challenge

No way for "no way"! In close coordination with customers and partners, the G+R Technology Group develops innovative plants and reactors in order to be able to cope with most difficult challenges. In this context, the G+R Group specialized in the manufacture of CVD-reactors (separation reactors according to SIEMENS processes), low-voltage and medium voltage electrodes for the CVD-

and Converter-reactors. Low-voltage electrodes for Converter-reactors, tube bundle heat exchangers, TCS/STC vaporizers as well as TCS/H<sub>2</sub> storage tanks are part of the G+R product range.

### State-of-the-art - worldwide

G+R is internationally certified and meets all welding qualification requirements according to standards such as AD 2000/PED, ASME, SELO and GOST – at the premises as well as on-site, at the customer's. Highly-skilled, productive and experienced staff, innovative design and simulation software as well as FEM-analyses guarantee efficient high-performance plants.

### Precise project planning and most-modern technologies

By means of high-tech fluid engineering, all process parameters can already be observed during the planning stage – in order to meet the highest demands. The three-dimensional construction technology guarantees optimal solutions. Focus on the expertise and longtime experience of the G+R experts in the areas of plant and reaction vessel construction.

### Our ultimate way to success: all from one single expert source

By opting for the G+R Technology Group, you are clearly in the driver's seat. Starting off with a comprehensive and strategic consultancy to the initial start-up - we provide you "all from one single source" solutions. Our ultimate way to success: the collaboration with experienced partners and the in-house manufacture guarantee highest quality and precision.



## > Energy for the Future. Water for the World.

The G+R Technology Group, situated in Regenstauf, Bavaria with approximately 250 highly skilled employees and engineers today is one of the technology leaders in Germany. In an area of more than 28.000 square metres of factory and production space, every day future-oriented solutions are worked out.

The G+R Technology Group is perfectly prepared for the future: seven decades of experience, permanent innovations, worldwide highly appreciated products, highest quality standards and the latest engineer expertise guarantee a huge market in the areas of GreenTech, PolySilicon, MachineConstruction and SpecialPlants as well as highly developed Heating/CoolingSystems.

Explore the foresighted G+R visions – long-lasting investments for a successful future. The time is ripe to invest in tomorrow's pure energies and solutions.

The "green technologies" are considered to be the growth market par excellence and might overtake the other German industry branches until the year 2020. The G+R Technology Group specialized in the future-oriented fields of silicon extraction as well as resource-friendly and highly-efficient biomass treatment and recycling. This includes the processing of slaughter wastes, animal carcasses and leftover food, of municipal and industrial sludges, CO<sub>2</sub>-neutral energy extraction and recycling from biomass as well as the long-term use of renewable raw materials. Always having two goals in mind: opening up perspectives to investors in a promising environment as well as creating new pure energies for a better world every day.

Certified quality – made in Germany.

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